

SUMMARY OF CLAIMED SUBJECT MATTER

Claim 1

Claim 1 outlines the method steps for cleansing a filter 101 with purified water.

Applicant's specification defines "purified water" as "water having a lower total dissolved solids reading than the water being filtered, preferably with a total dissolved solids reading fifty percent lower than that of the water being filtered, more preferably with a total dissolved solids reading eighty percent lower than the water being filtered, and still, more preferably, with a total dissolved solids reading ninety five percent lower than that of the water being filtered," (see page 5, lines: 5-10). Applicant has further defined "filtration devices" as devices that remove particles up to a preselected size range (see page 2, lines: 15-16). Applicant's invention describes delivering "filtered water" to an end use device 107, and cleansing the filter 101 in the filtered flowpath with purified water.

The first step of claim 1 recites, "passing water from a water source 106 through a filter 101, thereby producing filtered water," (see page 6, lines: 8-15, in light of Figure 3). Filtration devices in this disclosure include filters 101 that remove particles up to a pre-selected size range (see page 2, lines: 15-16).

The second step of claim 1 recites, "delivering the filtered water to an end use device 107," (see page 6, lines: 15-16, in light of Figure 3).

The third step of claim 1 recites, "providing a source of purified water, wherein the purified water has a lower total dissolved solids reading than the water being filtered," (see page 3, lines: 5-7).

The fourth step of claim 1 recites, "exposing the filter 101 to the purified water." Applicant's invention discloses a variety of forms to cleanse the filter 101, including submerging

a filter 101 or a filter cartridge 118 into a container holding purified water and backflushing the filter 101 or filter cartridge 118 (see page 5, lines: 19-23, in light of Figures 1-3).

Claim 36

Claim 36 is drawn to a backflush unit 100 utilizing a primary flowpath 150 for delivering filtered water to an end use device 107, and a secondary flowpath 160 used for backflushing routines, wherein purified water is the source water for backflushing the filter 101 (see page 6, lines: 6-16, in light of Figure 4). Switching an inlet valve 102, a drain valve 104, and a flush valve 103 substantially simultaneously provides two distinct flowpaths (see page 7, lines: 13-22 through page 8, lines: 1-3). The secondary flowpath 160 is in fluid communication with the flush source 108 (see page 7, lines: 3-7, in light of Figure 4), whereby purified water moves backwards through the filter 101 and then moves past the drain valve 104. Accordingly, switching the valves 102, 103, and 104 a second time returns the backflush unit 100 to the primary flowpath 150, with the concentrations of solids removed from the primary flowpath 150 (see page 8, lines: 12-23 through page 9, lines: 1-3).

The first step of claim 36 recites, “flowing water from a water source through a primary flowpath 150 in a filtered flowpath to an end use device 107, thereby delivering filtered water to the end use device 107,” (see page 6, lines: 6-16 in light of Figure 4).

The second step of claim 36 recites, “providing a source of purified water 108, wherein the purified water has a lower total dissolved solids reading than the water being filtered,” (see page 8, lines: 4-9, in light of Figure 4). Applicant further asserts that Applicant has defined “purified water” in the specification (see page 5, lines: 4-9).

The third step of claim 36 recites, “switching an inlet valve 102, a drain valve 104, and a flush valve 103 in the filtered flowpath from the primary flowpath 150 to a secondary flowpath 160 that allows purified water into the filtered flowpath,” (see page 7, lines: 12-14, and page 8, lines: 1-3, in light of Figure 4).

The fourth step of claim 36 recites, “flowing the purified water into the secondary flowpath 160, wherein the secondary flowpath 160 allows the purified water to flow backwards through the filter 101 for a predetermined interval to remove or dissolve filtered media or unclog a filter 101 in the primary flowpath 150,” (see page 8, lines: 15-21, in light of Figure 3).

The fifth step of claim 36 recites, “switching the inlet valve 102, the drain valve 104, and the flush valve 103 from the secondary flowpath 160 to the primary flowpath 150 to resume the delivery of filtered water to the end use device 107,” (see page 8, lines: 21-23 through page 9, lines: 1-2, in light of Figure 4).